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THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

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THE MICHIGAN MUNICIPAL BOND AUTHORITY

Janet Hunter-Moore, Executive Director

Under the Authority of Part 54, Clean Water Assistance, of the Natural Resources
and Environmental Protection Act, 1994 PA 451 and the Shared Credit Ratings Act, 1985 PA 227

Present the

FISCAL YEAR 2002 ANNUAL REPORT of the MICHIGAN DRINKING WATER REVOLVING FUND

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December 2002

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Chart 1 – Cumulative Funded Projects

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I. INTRODUCTION

On August 2, 1996, the United States Congress passed the Safe Drinking Water Act (SDWA) amendments of 1996 (P.L. 104-182). This legislation authorized the creation of a revolving fund to provide low-interest loans to qualified water suppliers for repairs or enhancements to public water supply systems. In theory, this fund would be very similar to the State Revolving Fund (SRF) created to assist water pollution control projects.

Michigan responded to the new federal program by creating the Drinking Water Revolving Fund (DWRF). As with the SRF, the DWRF is co-administered by the Department of Environmental Quality (MDEQ) and the Michigan Municipal Bond Authority (MMBA). The MDEQ handles all programmatic issues, while the MMBA serves the program with its financial expertise.

While there are many similarities between the SRF and the DWRF, there are some notable differences. For instance, the SRF is permitted to fund only municipalities, while the DWRF may include privately owned community water suppliers and not for profit non-community water suppliers. The SRF has very limited set-aside funds, whereas the DWRF makes liberal use of special set-asides to fund administration, capacity development, source water protection, source water assessments, etc. The loan repayment length in the SRF is limited to 20 years, while the DWRF can extend up to 30 years for communities that qualify as “disadvantaged.”

II. PROGRAM CONTACTS

For financial issues dealing with the bonding structure, bond documents, financial detail and audit results, contact:

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For technical reviews of DWRF projects, permit issuance, and administration of the set-aside programs authorized by the SDWA, contact:

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For program oversight, grant administration, and project management issues, contact:

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III. PROGRAM STRUCTURE

Michigan operates the DWRF within a financing structure similar to that of the SRF. We offer loans to qualified applicants who possess at least investment grade credit. Investment grade credit may be demonstrated by a separate credit rating or a credit assessment letter from one of the rating agencies, by a pledge of state revenue sharing with sufficient coverage, or by credit enhancement. Michigan law allows for a county or a public authority to issue debt on behalf of underlying communities. The investment grade credit must be approved by the MMBA for the entity issuing the debt.

For water suppliers who are municipalities with granted bonding authority, this presents no significant challenges. The DWRF sells tax-exempt revenue bonds to provide money that is used to reimburse communities for incurred costs. As the DWRF reimburses suppliers, federal funds from the capitalization grant and state funds from the grant match are transferred into a debt service reserve account to provide coverage for the leveraged bond issue.

Both the DWRF and the SRF 2002 Revenue Bonds received the highest ratings from Fitch (AAA), Moody's Investor Services (Aaa), and Standard & Poor's (AAA). These ratings demonstrate a high level of confidence in the structure and administration of Michigan's infrastructure programs.

IV. LONG-TERM GOALS

Michigan's DWRF established a new funding source designed to protect and preserve public health within the state's boundaries. Michigan's geographical identity as a Great Lakes state affords its citizens with an abundant and high quality water resource from which to draw its drinking water. Unlike many states, Michigan water supplies are plentiful and periods of restricted use are few and far between in most communities. Given our abundant water resource, the challenge for water suppliers lies in protecting the high quality of the resource as well as ensuring that adequate volume and pressure exist to deliver potable water to the customer.

In light of the interest in protecting public health, the MDEQ and the MMBA have undertaken efforts toward the attainment of Michigan's long-term goals as stated in the Intended Use Plan (IUP):

- 1. To maintain statewide compliance with all applicable state and federal drinking water laws, rules and standards.***
- 2. To protect the public health and environmental quality of our state.***
- 3. To implement Source Water Assessment, Source Water Protection and Wellhead Protection Programs.***
- 4. To develop strategies within the DWRF to assist smaller, economically disadvantaged communities in meeting drinking water standards.***
- 5. To promote the DWRF as a viable tool for use by Michigan water suppliers in financing their waterworks system improvements or upgrades.***
- 6. To secure Michigan's full share of federal funding and to expeditiously obligate these funds, along with the state contributions, for the construction of eligible facilities which meet state and federal requirements.***

- 7. To develop effective partnerships with other federal and state financing sources to promote efficiency in environmental review procedures and coordination of funding.**
- 8. To administer a Capacity Assessment Program for all new community and non-transient non-community water supplies and to apply a Capacity Development Strategy to selected existing systems.**

Michigan is proud of its accomplishments in promoting compliance with all applicable drinking water requirements. Prior to the creation of the DWRF, project financing for community water supply was left largely to local unit's of government or to individuals investing in their own systems. The DWRF provides a source of infrastructure financing which assists communities in protecting both public health and well being. In Fiscal Year (FY) 2002, 15 loans were made totaling \$38,150,000. This brings the DWRF to a total assistance of \$197,115,000 for 77 water supply projects since 1997 (see Chart 1).

To achieve the long-term goal of maximizing benefits for "disadvantaged" communities, the MDEQ first defined how communities could qualify, and then identified additional benefits which would lessen the financial impact on communities. These additional incentives include loans with repayment over 30 years; use of technical assistance funds to help defray the costs of project planning; and 50 additional points in the priority scoring. To qualify as a disadvantaged community, a water supplier must:

- Meet the definition of a "municipality" as established in Sec. 5402(g). Private suppliers, such as manufactured housing communities, subdivisions, churches, or other non-municipal systems do not qualify for this designation if they are the applicants for DWRF assistance.
- Directly assess users within the area served by the proposed water supply project for the costs of construction. Municipalities that choose to assess construction costs over a wider area than the service area of the project may not qualify as a disadvantaged community unless the entire area to be assessed for the project meets the criteria set forth in Part 54. This may ease the economic impact of utility rates by spreading them over a larger user base; however, such action may not circumvent the intent to assist only those users truly unable to pay for the waterworks system improvements.
- The water supplier must also demonstrate at least one of the following:
 1. More than 50 percent of the geographic area to be served by a proposed public water supply project is identified as a poverty area by the U.S. Bureau of the Census.
 2. The Median Annual Household Income (MAHI) for the area to be served by a proposed public water supply project is less than the most recently published Federal Poverty Guidelines for a family of four in the 48 contiguous United States. These guidelines are published annually by the U.S. Department of Health and Human Services.
 3. The MAHI for the area to be served by a proposed public water supply project is less than the most recently published statewide MAHI for Michigan, and annual

user costs [as defined in 1994 PA 451, Section 5401(B)] for water supply will exceed 1.5 percent of the MAHI of the area to be served by the proposed public water supply project.

4. The MAHI for the area to be served by a proposed public water supply project is greater than the statewide MAHI for Michigan, (up to 120 percent) and annual user costs for water supply will exceed 3 percent of the MAHI of the area to be served by the proposed project.

A municipality will not qualify as a disadvantaged community if the MAHI of the service area exceeds 120 percent of the updated statewide MAHI.

V. SHORT-TERM GOALS

In order to accomplish the long-term goals, we focused on more immediate objectives. Our short-term goals in FY2002 were:

A. To continue our outreach effort to publicize the DWRF through direct mail, electronic media, newsletter publication, workshops, and meetings.

Our outreach efforts have been very successful. Program managers continue to meet with interested public water suppliers, consulting engineers, and associations with an interest in water supply issues. In addition, substantial program information is available through the internet on MDEQ's web site.

B. To continue implementation plans for source water protection focused on statewide surface water assessments and groundwater assessments in areas tributary to the Great Lakes.

The 1996 amendments to the federal SDWA required states to submit source water assessment programs (SWAP) by February 6, 1999, for Environmental Protection Agency (EPA) approval. Michigan's SWAP was submitted on time and approved by the EPA in October 1999. The SWAP Advisory Committee has met 12 times since 1997 to develop the SWAP and assist with technical and public involvement issues.

The intent of the SWAP is to identify the areas that supply public drinking water; inventory contaminants and assess water supply susceptibility to contamination; and inform the public of the results. Michigan has almost 12,000 community and non-community public water supplies with an estimated 18,000 sources to assess by December 2003. To date, 8,200 non-community, 47 surface water, and 560 community groundwater source water assessments are underway.

In 1997, the state of Michigan reserved the maximum allowable, one-time 10 percent set-aside for SWAP of \$5,968,110 from the initial federal capitalization of the DWRF. There were no SWAP expenditures in FY1997, but expenditures of \$372,879 in FY1998, \$1.4 million in FY1999, \$1.1 million in FY2000, \$825,000 in FY2001 and \$1.2 million in FY2002. An updated SWAP Workplan/Budget was submitted to the EPA in October 2001 and approved on December 6, 2001, to allow full expenditure of the initial SWAP set-aside through May 2003. EPA has accepted further extension of the Michigan SWAP through December 2003.

Major SWAP expenditures in FY2002 included continuing non-community assessment contracts with Michigan State University Institute of Water Research and the local health departments. Joint Funding Agreements were continued with the

U.S. Geological Survey to develop the connecting channels flow model in Southeast Michigan and assist with surface water and karst source water assessments. In addition, an \$82,481 Memorandum of Understanding continued with the National Oceanic and Atmospheric Administration, National Buoy Data Center, to equip and operate a real-time weather station on Lake St. Clair to support the connecting channels flow model.

SWAP activities will continue through December 2003 to achieve the goals established by the SDWA.

C. To enhance the State's Wellhead Protection Program through the implementation of matching grant programs.

Efforts to enhance wellhead protection areas of community water supplies embrace two fronts. During FY2002, the Water Division (WD), formerly known as the Drinking Water and Radiological Protection Division, continued efforts to develop and implement local Wellhead Protection Programs under the existing voluntary state program by administering the fifth round of matching Wellhead Protection Grants. Following is the history of grant awards in this program since its inception:

FY1998	54 communities awarded \$1,010,400
FY1999	62 communities awarded \$1,080,390
FY2000	66 communities awarded \$1,036,000
FY2001	85 communities awarded \$1,281,546
FY2002	84 communities awarded \$1,259,607

Total to Date 351 communities awarded \$5,667,943

During FY2002, the WD continued the Clean Michigan Initiative (CMI) Abandoned Well Management (AWM) Grants Program. This is a comprehensive 75 percent state-share grant program to manage abandoned wells identified inside wellhead protection areas of community public water supply sources. The first round of AWM grant contracts funded under the CMI was approved in June 2001 using \$1.2 million in authorized CMI funds. 36 communities that operate public water supplies utilizing a groundwater source are participating in the AWM grants program at this time. Some highlights of these projects include:

- Developing new search methodologies for efficiently locating abandoned wells.
- Identifying, contracting and obtaining the permission of property owners to access properties to plug abandoned wells, in urban settings.
- Mapping the location of abandoned and active wells using Geographic Information Systems (GIS) with the aid of Global Positioning System (GPS) technology.
- Developing local ordinances that require plugging of abandoned wells on demolition sites and in areas where municipal water service is installed.
- Developing and implementing the technical language and specifications necessary for bidding abandoned well plugging work.
- 13 grantees have advanced through the bidding phase and are proceeding to plug abandoned wells.

- 2 grantees have completed the plugging phase and have submitted final Abandoned Well Project Reports.

The WD allocated and spent \$225,000 from the set-aside funds for administration of the AWM Program in FY 2002. Administration and coordination of the statewide program is provided out of the Lansing office of the WD. Staff expenses included one full time equivalent assigned to the Groundwater Section to coordinate AWM Program activities. The statewide program is implemented in the field through local health department operations contracts and by WD staff stationed in district offices. Program highlights from FY2002 included:

- Statewide implementation of AWM Program minimum program requirements at local health departments.
- Improved well drilling contractor and property owner conformance with abandoned well plugging requirements on replacement well sites was documented during local health department program evaluations.
- WD district office staff advised water utilities of abandoned well plugging requirements where municipal water service line extension permits were issued.
- WD and local health departments conducted civil enforcement actions involving improper abandoned well plugging methods and/or materials, failure to plug abandoned wells at demolition sites and improper plugging of abandoned wells by unauthorized persons.
- A WD protocol for investigating potential criminal activities involving illegal burial of unplugged or improperly abandoned wells was developed and implemented.

D. To implement a Technical Assistance Program for small communities.

There are no authorized FTEs for this program. Existing staff in the WD and ESSD/MFS will administer it. During FY 2002, one community qualified for disadvantaged community set-aside funds. The village of Marion received \$72,751 from the Technical Assistance Set-Aside for reimbursement of their planning costs.

The expected uses of the funds began in FY1999. The DWRPD developed contract specifications and offered a four-year contract to provide site-specific technical assistance to community and non-transient, non-community public water supplies serving a population less than 10,000. The contract underwent a competitive bidding process and was awarded in January 1999. The contractor initiated work and expended \$33,742 in FY1999, \$139,653 in FY2000, \$177,430 in FY2001 and \$239,806 in FY2002. To date, 1,374 on-site visits and 56 training sessions have been conducted, including 336 site visits and 22 training sessions in FY2002. Public Outreach and Public Information Services have also been performed in this contract to alert very small systems of their responsibilities as public water supplies. Remaining funds in the technical assistance set-aside are available for communities that qualify as disadvantaged communities with a population less than 10,000. These moneys will be used to help defray the cost of planning for projects submitted by the local officials.

During FY2002, several initiatives were implemented with technical assistance funds. Special monitoring for arsenic at small groundwater systems was conducted to assist these systems in their planning for the new Arsenic Maximum Contaminant Level. In FY 202, \$6,303 was spent on this monitoring program. In addition, in a joint effort of the WD and ESSD, a pilot project was undertaken to conduct financial capacity assessments at small community public water systems faced with system deficiencies. Eight assessments were performed and the WD is currently evaluating the benefits of continuing this effort. The technical assistance funds used to perform this pilot project totaled \$5,156.

E. To fund projects identified on the PPL enabling communities to proceed during FY2002 with the construction of facilities included in their adopted project plans.

The DWRF provided low interest financing to 15 projects totaling over \$38 million. The MDEQ and the MMBA committed all available project funds in FY2002.

VI. ESTABLISHMENT OF INTEREST RATES

The primary advantage for Michigan water suppliers is their ability to borrow funds at below market rates. The DWRF interest rate is established prior to each new fiscal year. As identified in Part 54, 1994 PA 451, determination of the interest rate is based on demand, market conditions, program costs, and future needs. Since a portion of the state match in any given fiscal year may be financed with State Revenue Match bonds, the upcoming year's interest rate must also account for the expense incurred in securing the bonds.

The DWRF is unique when compared to the SRF, in that both municipal and non-municipal water suppliers may participate if they are qualified. In assessing the market conditions for each type of entity, it was quickly apparent to MDEQ staff that a municipality would enjoy lower rates of interest on the open credit markets than would a private, non-municipal supplier who would normally have to obtain taxable financing through commercial lending institutions.

Based on the knowledge that market conditions generally demand higher rates of interest for non-municipal borrowers, and considering limitations of having to serve them through a direct, non-leveraged program structure, the director of the MDEQ has determined that the DWRF will provide similar subsidy rates to both municipal and non-municipal borrowers. The interest rate in FY2002 was 2.5 percent for municipal borrowers, and a 2.5 percentage point buy-down of interest for private water suppliers, although no private water suppliers were on the Project Priority List.

VII. ADVANTAGES OF THE DWRF

Apart from the low interest rate, suppliers also benefit from the DWRF in that they can finance all eligible waterworks system costs. The major benefit results from the fact that water supply financing in the past has always been left to the local units of government or private entities. Historically, there has been no significant state financial assistance available to local officials in meeting water supply needs. The DWRF will provide an on-going source of funding to maintain or improve drinking water quality and public health.

In addition, the on-site technical assistance, opportunities for source water assessment and protection, operator training and certification program, and the abandoned well management program provide a blend of direct and indirect aids to local communities across Michigan.

VIII. ALLOCATION OF FUNDS

Allocation of funds among eligible uses is based on a three-step process. First, the MDEQ and the MMBA identify the new sources of funds to be added to the revolving fund and the spending limits for the DWRF within the given fiscal year. Next, a determination of the type and amount of financial assistance necessary for each supplier is made. Finally, funds are allocated among the projects consistent with amounts available and the project's priority standing.

The following identifies the new sources of funds available to the DWRF for FY2002:

FY2002 Title IX Funds	\$33,003,000
FY2002 State Match	<u>\$ 6,600,600</u>
Total	\$39,603,600

In FY2002, Michigan's DWRF requested set-asides for the following (amounts include federal and state funds):

• DWRF Administration	\$ 1,584,144
• Small Community Technical Assistance	\$ 674,000
• Source Water Protection	\$ 225,000
• Capacity Development	\$ 450,000
• Operator Certification	\$ 500,000
• Wellhead Protection	\$1,000,000

An application for a capitalization grant resulting from FY2002 federal appropriations was submitted by the MDEQ to the EPA. There is an additional match of \$1,175,000 from an in-kind contribution credit against the Public Water Supply Supervision program administered by the DWRPD. The in-kind match meets the dollar-for-dollar requirement for source water protection, capacity development, and operator certification. The cash match meets the overall 20 percent program match requirement.

The governor of each state may, at his or her discretion, transfer 33 percent of available moneys between the SRF and the DWRF programs. This may occur starting one year after a state receives its first capitalization grant for project funds. This option was not considered during the period covered by this annual report.

IX. EPA AUTOMATED CLEARINGHOUSE ACTIVITIES

As the federal capitalization grants for the set-aside funds were awarded, EPA processed automated clearinghouse requests for increases to the state's draw capabilities. In FY2002, \$4,177,919 was drawn for the set-asides. In addition, \$38,258,353 was drawn for loan expenditures in FY2002.

X. ASSURANCES

The final guidelines from the EPA set forth provisions that the state must give certain assurances in order to qualify for capitalization grant funding. These assurances were incorporated into the Operating Agreement signed by the EPA, the MDEQ, and the MMBA on December 9, 1997. Along with federal and state law, the Operating Agreement serves as the framework by which Michigan's DWRF program operates.

The MDEQ and MMBA have fulfilled the stated assurances throughout the operation of the DWRF during this fiscal year.

XI. SUMMARY

Of the total \$38,150,000 loaned to 15 projects during the fiscal year, the cost breakdown of categories is as follows (see Chart 2):

• I. Transmission/Distribution	\$28,862,908
• II. Treatment	\$ 7,274,860
• III. Storage	\$ 1,397,276
• IV. Source	\$ 614,956
• V. Other	\$ 0

In FY2002, 14 projects initiated operation. This brings the total to date to 55.

Over the course of the year, the MDEQ and MMBA processed \$ 42,436,272 in actual disbursements. This included \$1,110,679 in disbursement requests for MDEQ and MMBA administrative costs. Non-administrative set-aside requests added another \$3,067,240.

Prior to September 30, 2001, the MDEQ was already at work preparing projects that were vying for FY2002 funding. Project plans from interested communities were due to the MDEQ on May 1. The Intended Use Plan and Project Priority List were prepared and a public hearing was held in August. Like FY2001 projects, these projects received an environmental review by the project managers and district engineers in the MDEQ.